from peritonitis due to failure of the suture of the bowel; one of three patients who recovered was in good health two years afterwards; the two others were operated upon more recently. These, likewise, had gained very much in general health and weight.—*Deutsche Zeitschrift f. Chirg.*, Bd. XXXIV., p. 65.

V. Primary Sarcoma of the Small Intestine. By Prof. Dr. MADELUNG (Rostock). Sarcoma attacking primarily the walls of the stomach or intestine is comparatively a very rare disease. This is particularly true of primary sarcoma of the small intestine, heretofore scarcely mentioned in the literature of malignant disease. The development of the tumor in this connection is peculiar, and this, together with the appearances presented, differ greatly from those presented by other neoplasms of the bowel. The author, on the basis of three cases occurring under his own observation, and of eleven cases collected from various sources, presents the following sharp characterization of the disease:

Sarcoma of the small intestine belongs, in most instances, to the round-cell variety, with small cells, and rarely to the spindle-cell type of the disease. They, in all probability have their origin in the sub-mucous layer, and spread in this by preference. The muscular structure is the next to be invaded, and later the mucous membrane; the peritoneum is very rarely attacked, even in advanced cases. As a result of this peculiarity of the method of invasion of the muscular structure of the bowel, the latter becomes paralyzed, and the diseased portion is dilated so as to remind one of an aneurism. Narrowing of the lumen does not occur, even if the mucous membrane becomes extensively diseased. In consequence of the dilatation excessively large tumors are formed early.

Should the tumor force its way through the serous covering, large and irregular intra-peritoneal abscesses with fecal matter as a portion of their contents arise. Metastatic formations in the lymphatic glands of the omentum and mesentery, as well as in the liver and kidneys, occur early. In one instance the small intestine was attacked in two separate places.

The etiology of the disease was not suggested by anything in the histories. In one instance a severe blow upon the abdomen preceded the development of the disease.

In only a single instance among the fourteen was the disease opened in the female. The majority of cases occurred during the third and fourth decade of life; in only three cases the fortieth year had been passed.

A notable characteristic is the slight local disturbance compared with the rapid progress of the general disease. General loss of strength and weight, and other evidences of considerable impairment of the general health were observed before slight gastric disturbances and local pain called attention to the abdomen. Persistent constipation even is not a feature of the disease unless brought about by some special complication; in this respect there is apt to be an alternation between the two conditions of constipation and diarrhœa.

Another peculiarity of these growths is the fact that they remain more or less distinctly circumscribed and mobile for a comparatively long time. They grow with extreme rapidity, are generally of a hard consistency, although sometimes the centre seems soft and almost fluctuating.

The duration of the affection is usually very short. The shortest duration in M.'s series was but a fortnight; the longest period was twenty-one months; an average of nine months was observed.

Death generally takes place as the result of exhaustion, particularly in cases of intra-peritoneal abscess. One patient died from invagination. The portion of intestine attacked by sarcoma became invaginated, afterward gangrenous, and was finally passed per rectum. In one instance the bowel became rotated upon its own axis at the site of the disease.

The diagnosis of the affection during life differentiating it from other forms of abdominal tumor may be made upon the basis of the above mentioned characteristics. Exploratory laparotomy will serve to clear up the matter. In making the differential diagnosis, the time of life of development, the local symptoms (large size of tumor, etc.), the rapidly developed cachexia, and the absence of stenosis. Perforation and formation of fecal abscesses having occurred, the ap-

pearances, both local and general, resemble those of certain cases of tuberculosis of the peritoneum.

Operation in this class of cases is, as a rule, out of the question. The early formation of metastases forbid interference. Of two patients operated upon by Nicolaysen and Mikulicz, the patients sur vived the operation. The only record to be found concerning the after histories of these patients consists of the statement that the first was living on the twenty-fifth day after the operation, and the other that he was alive on the fifteenth day. M. operated upon two cases. In one case the procedure advanced no further than an exploratory laparotomy, from which the patient died nine days subsequently. The second case died twenty-four hours following an extirpation of the tumor. The autopsy revealed extensive and advanced metastatic deposits in the liver and omentum.—*Centralblatt f. Chirg.*, July, 1892.

VI. Tuberculosis of Herniæ. By Prof. Dr. BRUNS (Tuebingen). Tuberculosis is the rarest pathological change of a hernia. B. adds one new case to the twelve already published. Of these thirteen the hernial sac was attacked ten times and in seven it was alone the seat of the disease. This, together with other conclusions, substantiate the belief that "tuberculosis of herniæ may occur as a primary disease; generally, however, it is associated with general peritoneal tuberculosis.—*Beiträge zur klin. Chirg.*, Bd. IX., p. 209.

VII. Treatment of Strangulated Herniæ when Gangrene is Imminent. By Dr. THORNHILD ROVSING (Copenhagen). The method, described and recommended almost simultaneously by Graefe and the author, consists in pulling forward the suspicious loop of bowel (having broken up the adhesions) and suturing it to the abdominal wall. The sutures should be of catgut or silk and only include the serous membrane or layer of the bowels. Then dress the bowel with sterilized gauze, wait developments; if the loop return to its normal condition, remove the suture, replace the loop and the interrupted herniotomy is completed. In case, however, gangrene occurs either resect the bowel or establish an artificial anus. The reason that this simple method was not recommended and practiced